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WHAT IS CLAIMED IS:

1 1. A base station modulator/demodulator for constituting
2 a mobile communication system and sending ATM cells to a higher
3 rank station and receiving ATM cells from the higher rank
4 station, said base station modulator/demodulator comprising:

5 receive means for terminating, among ATM cells received
6 from the higher rank station through a leased line, ATM cells
7 addressed to the base station;

8 first send means for sending, among the ATM cells
9 received from the higher rank station through the leased line,
10 ATM cells addressed to another base station to the another base
11 station; and

12 second send means for multiplexing ATM cells of a
13 plurality of base stations, said base station and said another
14 base station, and sending the multiplexed cells to the higher
15 rank station through the leased line.

1 2. The base station modulator/demodulator according to
2 claim 1, wherein

3 the receive means identifies, from ATM cells received
4 from the higher rank station through the leased line, ATM cells
5 addressed to said base station based on a virtual path
6 identifier in an ATM header preset in the base station, and
7 terminates the identified ATM cells, and

8 the first send means identifies, from ATM cells received
9 from the higher rank station through the leased line, ATM cells
10 addressed to said another base station based on a virtual path

11 identifier in an ATM header preset in the another base station.
12 and sends the identified ATM cells to the another base station.

3. The base station modulator/demodulator according to
claim 1 or 2, which further comprises:

3 discard means for discarding, among the ATM cells
4 received by the receive means from the higher rank station
5 through the leased line. ATM cells having a virtual path
6 identifier different from the set value; and

insertion means for inserting an idle cell instead of the ATM cell discarded by the discard means.

4. The base station modulator/demodulator according to
claim 1 or 2, wherein the second send means performs band
control in such a manner that, in multiplexing ATM cells of the
plurality of base stations, the base station and the another
base station, and sending the multiplexed cells through the
leased line to the higher rank station, the number of times of
send of the ATM cell of the base station and the ATM cell of
the another base station is varied based on the band set value
predetermined for the leased line.

5. The base station modulator/demodulator according to
any one of claims 1, 2, and 4, wherein the base station has the
same processing function as the another base station.

6. An ATM cell send/receive method in a mobile communication system for performing send/receive of ATM cells

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3 between a higher rank station and a base station, said method
4 comprising the steps of:

5 terminating, among ATM cells received from the higher
6 rank station through a leased line, ATM cells addressed to the
7 base station;

8 sending, among the ATM cells received from the higher
9 rank station through the leased line, ATM cells addressed to
10 another base station to the another base station; and

11 multiplexing ATM cells of a plurality of base stations.
12 said base station and said another base station, and sending
13 the multiplexed cells to the higher rank station through the
14 leased line.